

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-022795**Date Inspected:** 21-Apr-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC) Chanxing Island**Location:** Shanghai, China**CWI Name:** Mr. She Lei**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Segment**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance Inspector (QA), Vibin Kumar Selvanayaham, was present during the times noted above for observations relative to the work being performed.

Magnetic Particle Testing (MT) – NWIT Document No's: 008891

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as OBG Segment 13CE. The weld designations reviewed are as follows:

1. LD3030-001-161, 162, 165, 166, 188, 189, 192, 193, 194
2. LD3030-001- 195, 198, 199, 221, 222, 225, 226, 227, 228
3. FB3162A-001-053, 055, 056, 058, 059, 061, 062
4. FB3162A-001-043, 044, 047, 046, 049, 050, 052
5. FB3158A-001-032, 033, 038, 039, 044, 045
6. SEG3011N-219, 220, 217, 218, 215, 216, 213, 214, 211
7. SEG3011N-212, 209, 210, 207, 208, 205, 206, 203, 204

Ultrasonic Testing (UT) – NWIT Document No: 008884

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The members are identified as

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OBG Segment 13CW. The weld designations reviewed are as follows:

1. SEG3015K-195
2. SEG3015F-210
3. SEG3014B-144
4. SEG3014D-350
5. SEG3014H-154
6. SEG3014F-212

Description of Incident: During the Quality Assurance Ultrasonic Testing (UT) verification of weld located on OBG Segment 13BW, this Quality Assurance Inspector (QA) discovered the following issue:

- One (1) Class “A” indication measuring approximately 20mm in length.
- The Indication rating is +7dB and length approximately 20mm.
- The nominal thickness of the plate is 14mm and depth of the indication approximately 10mm.
- The indication is located on the weld joint identified as SEG3015B-144.
- The “Y” location for this indication is approximately 520mm from top of this weld.
- The weld is a Complete Joint Penetration (CJP) “T” weld joint joining Floor Beam to Vertical Plate at panel point 122.
- The indication is clearly marked by QA on/near the weld.
- This weld is designated as non Seismic Performance Critical Member (non SPCM).
- OBG Segment 13BW is located in Trail Assembly North Side.
- The Notice of Witness Inspection Number (NWIT) is 008884.
- The indication is located within the area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel.
- As per the contract documents, ZPMC’s QC personnel are required to perform 100% UT inspection of this weld. See the attached picture.

OBG Trail Assembly

This QA Inspector observed the following work in progress:

Shielded Metal Arc Welding (SMAW) welding of weld joint SEG3015H-207 located on Vertical Plate RS Stiffener at panel point 123 of OBG Segment 13CW. ZPMC Welder is identified as 066326. ZPMC Quality Control (QC) is identified as Mr. She Lei. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2213-Tc-U4b-FCM-1.

SMAW welding of weld joint SEG3014B-012 located on Floor Beam to Vertical Plate at panel point 122 of OBG Segment 13BW. ZPMC Welder is identified as 045196. ZPMC Quality Control (QC) is identified as Mr. She Lei. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2212-Tc-U4b-FCM-1.

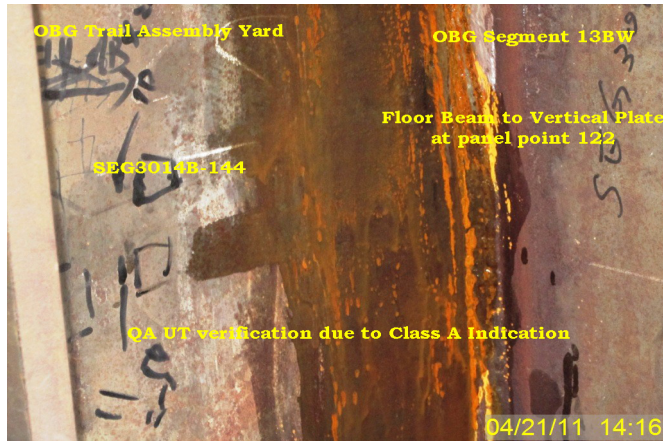
SMAW welding of weld joint SEG3015F-233 located on Vertical Plate to Diaphragm at panel point 123.5 of OBG Segment 13CW. ZPMC Welder is identified as 067588. ZPMC Quality Control (QC) is identified as Mr. She Lei. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2213-Tc-U4b-FCM-1.

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This QA inspector observed ZPMC personnel performed Magnetic particle Testing (MT) on Side Plate hold back RS stiffeners at E7 and E8 cross beam side of OBG Segment 13B/CW.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.



Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact , who represents the Office of Structural Materials for your project.

Inspected By:	Kumar,Vibin	Quality Assurance Inspector
Reviewed By:	Patel,Hiranch	QA Reviewer
